AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1.   (Currently Amended) A multichannel wavelength-division multiplex fiber optic transmission system, comprising:

an optical transmitter,

an optical receiver connected to the optical transmitter by an optical line, the line comprising:

at least one optical fiber, and

at least one set of channel regenerators,

wherein each one of the set of channel regenerators regenerates only a predetermined respective group of channels, each respective group forming only a subset of ~~said~~ a set of channels, and each channel of the groups is predetermined based on channel wavelength.

2.   (Previously Presented) The system claimed in claim 1, wherein the number of channel regenerators is a submultiple of the number of channels.

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3.   (Original) The system claimed in claim 1 wherein each group includes only one

channel.

4.   (Original) The system claimed in claim 3 wherein each regenerator is an optical

regenerator.

5.   (Currently Amended) The system claimed in claim 1 wherein at least one group

includes a plurality of the channels.

6.   (Currently Amended) The system claimed in claim 5, wherein the regenerator for

the group having the plurality of channels comprises:

means for synchronizing the plurality of channels, and

an optical regenerator unit performing the regenerating of the plurality of channels.

7.   (Previously Presented) The system claimed in claim 4, wherein each channel

regenerator comprises a synchronous modulator.

8.   (Previously Presented) The system claimed in claim 1, wherein each channel

regenerator comprises a demultiplexer and a multiplexer so as independently to process channels

which are to be regenerated and channels which are not to be regenerated.

9.   (Previously Presented) The system claimed in claim 1, wherein each channel

regenerator comprises an inserter/extractor system for isolating channels to be regenerated.

10.   (Previously Presented) The system claimed in claim 1, wherein each channel

regenerator comprises a compensator amplifier compensating intensity differences between

regenerated and non-regenerated channels.

11.   (Previously Presented) The system as claimed in claim 1 further comprising

supervisory means using a dedicated channel.

12.   (Previously Presented) The system claimed in claim 11, wherein each channel

regenerator comprises:

means for separating said dedicated channel from the other channels,

a supervisory unit for transmitting information relating to the status of said regenerator on

said dedicated channel, and

means for remultiplexing said dedicated channel with the other channels.

13.   (Previously Presented) The system claimed in claim 12, wherein:

each channel regenerator includes a regenerator unit for regenerating the channels of a

group of channels, and

the supervisory unit receives information from said regenerator unit and a portion of the

regenerated signal delivered by said regenerator unit.

14.   (Previously Presented) The system as claimed in claim 1 further comprising:

a plurality of spaced optical amplifiers, and

a plurality of spaced optical regenerators,

wherein the spacing of said optical regenerators is a multiple of the spacing of said

optical amplifiers.